

Problem Set #3 - Algebra Review

Date _____

Simplify each expression.

1) $(7n^2 + 5n^4 - 7) + (7n^2 + 5n^4 - 6)$

2) $(8x^2 - 7 - 4x^4) - (5 + 5x + 8x^2)$

Find each product.

3) $(3x - 2)(8x - 1)$

4) $(7p + 2)(p - 5)$

Simplify each expression.

5) $(4x^2 + 4x + 6) - (4 - 2x + 3x^2)$

Factor the common factor out of each expression.

6) $30r^5 + 10r^4 + 5r^3$

7) $-28m^6 + 36m^5 - 28m^4$

Solve each equation.

8) $-5(1 + 6n) = 235$

9) $-119 = -7(x + 6) - 4x$

Solve each equation by factoring.

10) $b^2 - 8 = -2b$

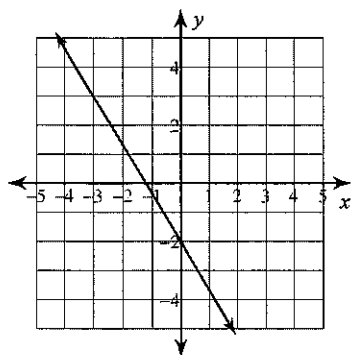
Name each polynomial by degree and number of terms.

11) $-8x - 9$

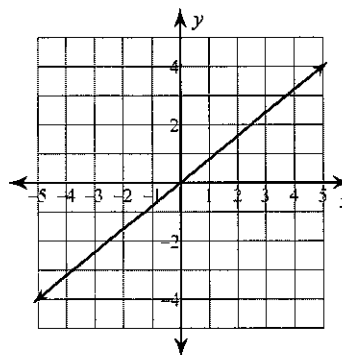
12) $-6m^4 + 8m^3$

Write the slope-intercept form of the equation of each line.

13)



14)



Solve each system by elimination.

15) $8x - 4y = 24$
 $16x + 9y = 14$